

HYDROGEN-USED POWER GENERATING SYSTEM

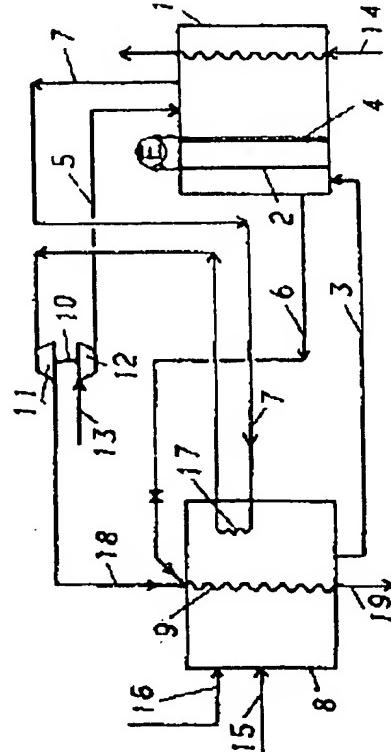
Patent number: JP59075574
Publication date: 1984-04-28
Inventor: NOJIMA SHIYOUNO; others: 01
Applicant: NIPPON KIHATSUYU KK
Classification:
- International: H01M8/06
- European:
Application number: JP19820185376 19821023
Priority number(s):

BEST AVAILABLE COPY

Abstract of JP59075574

PURPOSE: To enable operation of the fuel burning heater for a steam reforming reactor under a pressure close to the atmospheric pressure, by reducing pressure of the offgas from a fuel cell containing oxygen by an expander compressor after the offgas has been heated by remaining heat in a hydrogen generating apparatus.

CONSTITUTION: Offgas containing oxygen from a fuel cell 1 operated under a pressurized condition is introduced through a line 7 into a heat exchanger 17 within a hydrogen generating apparatus 8 so as to be heated, then passed through an expander 11 of an expander compressor 10 so as to be reduced in its pressure, and then supplied through a line 18 to a fuel burning heater 9 for a steam reforming reactor as an oxygen source for the burning. At the same time, atmospheric air 13 is pressurized by a compressor 12 and supplied to the fuel cell 1 as its oxygen source. Therefore, the fuel burning heater 9 for the steam reforming reactor within the hydrogen generating apparatus 8 can be operated under a pressure close to the atmospheric pressure without inviting any disadvantage in terms of consumed energy, and thus maintenance, inspection, and so forth can be greatly simplified.



Data supplied from the esp@cenet database - Worldwide